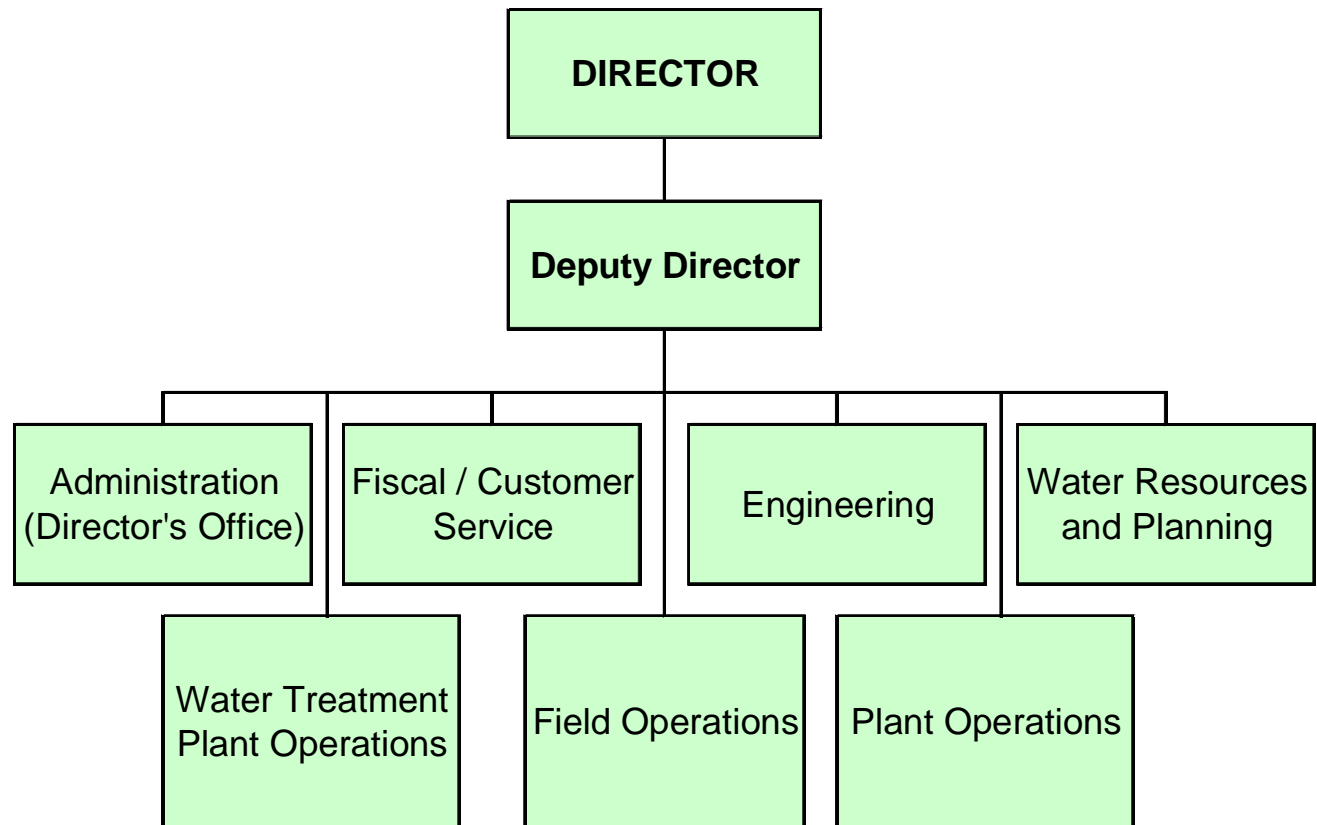


Departmental Organization Chart



Department Summary

Mission Statement:

To provide clean water efficiently.

Department Goals:

Administration

1. To manage the Department of Water Supply efficiently to provide a clean and inexpensive supply of water to Maui County.
2. To communicate information concerning water issues to the public in a clear manner.
3. To assure the ratepayers' and public concerns are addressed.
4. To gain the confidence of DWS employees.

Fiscal / Customer Service

5. To maintain the Dept. of Water Supply's financial soundness as demonstrated by an annual independent audit with a clean opinion and with no significant findings.
6. To continue to improve the quality (timely, accurate, professional) of services to internal and external customers.
7. To continue to improve the quality of service with the internal customer by implementing a pilot use of credit cards for Water Utility purchase in FY03 and full implementation completed in the following year; categorize pipes and fittings outside the warehouse which will provide a safer working environment
8. To continue to provide efficient and courteous service to the external customers in a professional and timely manner, i.e. installations and transfer closing bills, payment options, history and tracking.
9. To initiate process to implement a new billing system.

Engineering

10. Develop adequate water sources, storage and transmission for urban and agricultural uses.
11. Systematically replace, upgrade and improve existing infrastructure including pumps, distribution and transmission lines, storage and appurtenant facilities.

Department Summary

Department Goals (Continued):

Water Resources and Planning

12. Provide high quality master, area and capital planning to support Department goals and objectives.
13. Provide responsive and efficient permit and environmental review & other information services to other agencies, divisions and public.
14. Provide planning support and research necessary for regulatory compliance and to support maximal water quality.
15. Protect Maui County's water resources, conserve water and prevent contamination or degradation of water quality and quantity.
16. Develop and maintain planning information systems as needed to support ongoing planning efforts and projects of the Department.

Water Treatment Plant Operations

17. To operate the water treatment facilities to supply the highest quality potable water that meets all State and Federal drinking water regulations.
18. To achieve the maximum possible useful life from our existing facilities and equipment through effective preventative maintenance and repair programs.
19. To ensure the safety of our employees and the community through responsive safety planning, training and management.

Field Operations

20. To continue flushing programs to meet Department of Health requirements.
21. To provide timely response to system deficiencies to minimize water loss and consumer complaints.
22. Participate in Capital Improvements Projects to upgrade and to replace inadequate pipeline distribution systems.
23. Provide and install water meters as approved.

Plant Operations

24. To monitor and maintain clean water efficiently through laboratory testing.
25. To provide clean water to all consumers efficiently.
26. Provide electronic and computer support with emphasis in the development and maintenance of the Dept. of Water Supply's Supervisory Control and Data Acquisition System (SCADA).

DEPARTMENT OF WATER SUPPLY

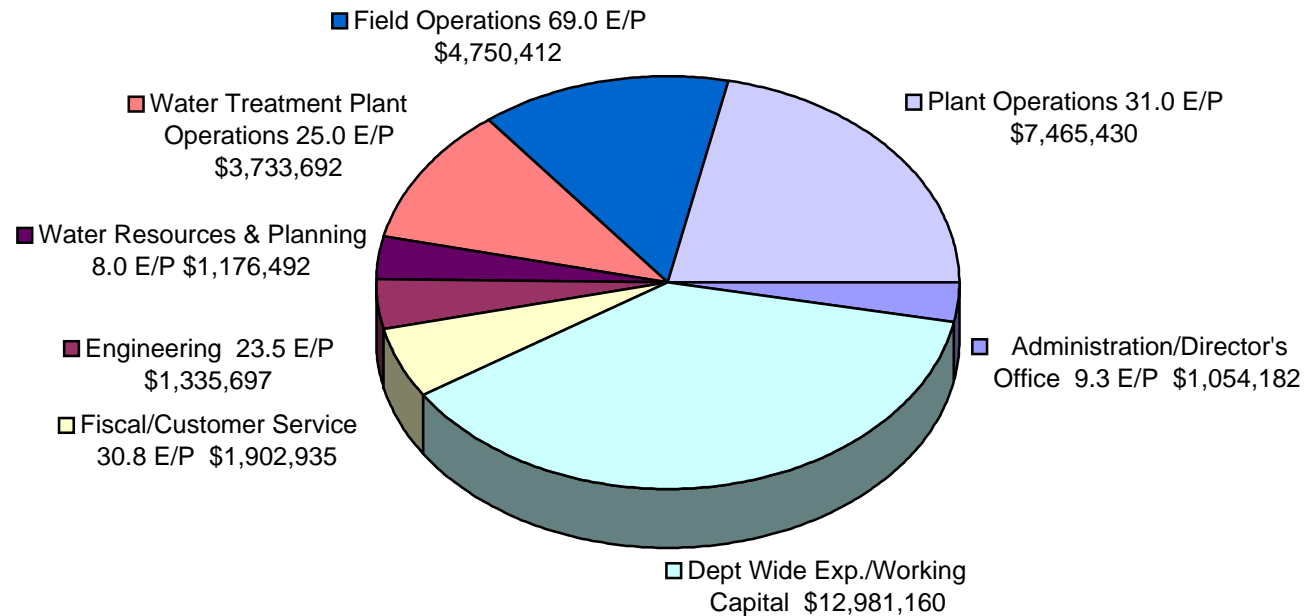
Department Revenues and Expenditures:

	Water Supply Fund	Bond Fund	Federal Funds	State Funds	Lapsed Bond	Water Assessment	Grant Revenue	Total
Revenues								
Total Revenues	\$ 35,980,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 20,670,000	\$ 0	\$ 56,650,000
Expenditures								
Admin/Director's Off	\$ 1,054,182	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 1,054,182
Dept Wide/Working Cap	12,561,160	0	0	0	0	420,000		12,981,160
Fiscal	1,902,935	0	0	0	0	0	0	1,902,935
Engineering	1,335,697	0	0	0	0	0		1,335,697
Resources & Planning	1,176,492	0	0	0	0	0		1,176,492
Water Treatment Plant	3,733,692	0	0	0	0	0	0	3,733,692
Field Operations	4,750,412	0	0	0	0	0		4,750,412
Plant Operations	7,465,430	0	0	0	0	0		7,465,430
CIP	<u>2,000,000</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>20,250,000</u>		22,250,000
Total Expenditures	\$ 35,980,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 20,670,000	\$ 0	\$ 56,650,000

Note: Department Revenues and Expenditures include Capital Improvement Program (CIP) projects.

Department Summary

FY 2004 Budget by Program



Water Supply Fund:	\$ 33,980,000	Water Supply Fund E/P:	196.6
Water Assessment	\$ 420,000	Water Assessment E/P:	0.0
TOTAL BUDGET:	\$ 34,400,000	TOTAL EQUIVALENT PERSONNEL:	196.6

DEPARTMENT OF WATER SUPPLY

Administration (Director's Office)

Program Description:

The Director and Deputy Director manage the Administration division. This division manages and controls all water systems of the County on a day-to-day basis, which includes overseeing all DWS functions and keeping the staff focused on "providing clean water efficiently." The Administration division recommends rules and regulations for adoption by the Mayor and County Council. The Division is in charge of human resources and community relations and provides water education and technical interpretation for legal issues.

Program Goals and Activities:

GOAL 1	To manage the Department of Water Supply efficiently to provide a clean and inexpensive supply of water to Maui County.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Work with personnel to complete required tasks to meet DWS standards and to complete them in a timely manner	Administration	Coordinate work loads with staff	Allow timely reviews and approvals for system expansions and improvements	N	

GOAL 2	To communicate information concerning water issues to the public in a clear manner.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Provide the public with information on system failures, drought conditions and any other pertinent information to maintain public confidence in the Water Director's Office.	Administration	Through the media, provide information as needed to maintain public satisfaction and knowledge of the water system.	Schedule public meetings, news releases, and mailouts for public review and education.	N	

DEPARTMENT OF WATER SUPPLY

Administration (Director's Office)

Program Goals and Activities (Continued):

GOAL 3	To assure the ratepayers' and public concerns are addressed.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Provide the means within which ratepayers may voice their concerns and have confidence that their concerns will be addressed.	Administration	Place appropriate items of concern on Board's meeting agenda, provide the means by which the public may meet with the Director and/or staff and follow up on concerns.	Schedule Board meetings, meetings with the Director and/or staff and final response to concerns.	N	

GOAL 4	To gain the confidence of DWS employees.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
To retain employee loyalty and dedication to the Department of Water Supply.	Administration	Fair and consistent treatment to employees; provide training opportunities; provide the means by which employees may express their concerns without fear of retribution.	Schedule meetings with employees upon request. Schedule training opportunities; provide advancement opportunities.	N	

Program Resources - Water Supply Fund:

Expense Type	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004		
	Actual	Actual	Actual	Appropriation	Request	Expansion	Total
Equivalent Personnel E/P	9.0	9.0	9.24	9.24	9.3	0.0	9.3
Salaries and Wages	\$ 344,997	\$ 366,202	\$ 364,403	\$ 449,914	\$ 444,437	\$ 0	\$ 444,437
Operations	316,679	425,085	771,454	809,375	604,745	0	604,745
Equipment	5,701	68,288	6,236	1,000	5,000	0	5,000
Program Total	\$ 667,377	\$ 859,575	\$ 1,142,093	\$ 1,260,289	\$ 1,054,182	\$ 0	\$ 1,054,182

DEPARTMENT OF WATER SUPPLY

Administration (Director's Office)

Program Resources - Water Supply Fund (Continued):

Department Wide Expenses/Revenue Fund Balance Sheet

Expense Type	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004		
	Actual	Actual	Actual	Appropriation	Request	Expansion	Total
Debt Service	\$ 5,865,635	\$ 6,290,601	\$ 6,288,433	\$ 6,282,617	\$ 6,279,655	\$ 0	\$ 6,279,655
Insurance	64,170	66,694	159,053	75,000	150,000	0	150,000
Overhead Charges	447,626	207,001	206,720	210,000	249,158	0	249,158
Employee Benefits	2,127,624	1,580,372	1,923,706	1,937,000	2,327,318	0	2,327,318
Refund for Mainline Expenses	232,696	349,906	428,666	450,000	500,000	0	500,000
Working Capital Emergency Fund	0	0	0	0	3,475,029		3,475,029
Program Total	\$ 8,737,751	\$ 8,494,574	\$ 9,006,578	\$ 8,954,617	\$ 12,981,160	\$ 0	\$ 12,981,160

Program Highlights:

Moved to fill the position of Engineering manager for the Engineering Division.

Continued working to improve the communication with the community on issues and information affecting the water users.

Performance Measures:

	FY 2002 Actual	FY 2003 Estimate	FY 2003 1st Qtr
Board meetings	47	22	9
Public meetings/School visits	12	11	4
Events/workshops	6	8	3
Website hits	15,000	19,650	9,200
Publications	6	7	3

DEPARTMENT OF WATER SUPPLY

Fiscal / Customer Service

Program Description:

The Fiscal Division administers the affairs of the accounting section and the customer service/billing section. Under the supervision of the Fiscal Officer, the division provides the department with financial information; budget development and control; customer service and subsidiary billing, maintenance and reporting for its 30,000+ services; central purchasing and vendor payment processing and reconciliation; payroll processing, financial summaries and reports for management and Board while adhering to Government and Utility accounting standards for its annual audit.

Program Goals and Activities:

GOAL 5	To maintain the Dept. of Water Supply's financial soundness as demonstrated by an annual independent audit with a clean opinion and with no significant findings.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
To provide timely, accurate and meaningful reports and services. To establish and maintain effective internal financial controls and processes consistent with GFOA recommended practices.	Fiscal	Continued use of IFAS to ensure accurate and meaningful reports and services through the year. Continue using IFAS for utility accounting also.	Develop continued IFAS system and accounting procedures to ensure accurate classification and reporting through the year. Train accounting personnel in any updates and upgrades in the IFAS system.	N	
To provide accurate integrated financial statements for the Department of Water Supply using Water Utility Accounting, consistent with the National Association of Regulatory Utility Commissioners.	Fiscal	Continue proper utility accounting to ensure utility is complying with NARUC and GASB regulations.	Review monthly financials and ensure proper compliance and coding is correct.	N	
To continue the preservation of the financial integrity of the Department of Water Supply through internal audit and fiscal control.	Fiscal	Review monthly financial reports to ensure financial integrity.	Yearly audit is reviewed and any significant findings are corrected immediately. Review processes on a regular basis to ensure proper classification and procedures.	N	

DEPARTMENT OF WATER SUPPLY

Fiscal / Customer Service

Program Goals and Activities (Continued):

GOAL 6	To continue to improve the quality (timely, accurate, professional) of services to internal and external customers.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
To process accounts payable and issue payments in a timely and efficient manner.	Fiscal	Streamline payment approval procedures and improve IFAS input procedures.	100% of vendor payments made accurately and by due date.	N	
To process payroll in a timely and efficient manner.	Fiscal	Continue with process of payroll in Ceridian and posting for labor distribution.		N	

GOAL 7	To continue to improve the quality of service with the internal customer by implementing a pilot use of credit cards for Water Utility purchase in FY03 and full implementation completed in the following year; categorize pipes and fittings outside the warehouse which will provide a safer working environment.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
To optimize the dollars spent on utility water purchases on goods, services and construction in accordance with applicable State and County laws.	Fiscal	Pilot the use of credit card purchases with Water Dept. Division.	Will review State of Hawaii Pilot Program.	N	
To expedite services to the internal customer by improving quality and availability of inventory on hand.	Fiscal	Arranging all pipes and fittings outside the warehouse.	Purchasing special weather resistant racks for outside pipes and fittings.	N	

DEPARTMENT OF WATER SUPPLY

Fiscal / Customer Service

Program Goals and Activities (Continued):

GOAL 8	To continue to provide efficient and courteous service to the external customers in a professional and timely manner i.e. installation and transfers, closing bills, payment options, history and tracking.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
To continue with efficient handling of external and internal customers in regards to payment options and service.	Fiscal	Investigate credit card payment options.	Accept credit card payments.	N	
		Improve the effectiveness and quality of our services.	Increase customer service training.		

GOAL 9	To initiate process to implement a new billing system.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
To review process of current billing system.	Fiscal	Request proposal for a billing system for the water and sewer bills.	Provide better access to customer accounts and flexibility in reporting.	N	

Program Resources - Water Supply Fund:

Expense Type	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004		
	Actual	Actual	Actual	Appropriation	Request	Expansion	Total
Equivalent Personnel E/P	31.0	30.0	31.72	31.72	30.8	0.0	30.8
Salaries and Wages	\$ 871,439	\$ 875,409	\$ 945,492	\$ 1,153,232	\$ 1,079,032	\$ 0	\$ 1,079,032
Operations	403,203	624,478	705,469	867,541	753,703	0	753,703
Equipment	76,438	8,356	48,021	28,695	63,000	7,200	70,200
Program Total	\$ 1,351,080	\$ 1,508,243	\$ 1,698,982	\$ 2,049,468	\$ 1,895,735	\$ 7,200	\$ 1,902,935

Fiscal / Customer Service***Program Highlights:***Accounting

Successful implementation of fixed asset system on IFAS.

Successful implementation of GASB 34 standards and reporting.

Audit with no exceptions for second year in a row.

Purchasing/Warehouse

Successful implementation of Stores Inventory module with IFAS.

Reorganization of warehouse interior to make operations more efficient.

Customer Service

Completion of 50% of record scanning for 1,000 customers.

99% completion of radio read meter implementation.

Implementation of automated meter inventory system that ties in with billing system.

Performance Measures:

	FY 2002 Actual	FY 2003 Estimate	FY 2003 1st Qtr
# of customers	31,021	31,700	31,339
Yearly consumption (in 1,000 gal)	12,312,305	12,500,000	3,374,054
# of bills issued	231,311	234,000	58,825
Requisitions processed	3,895	4,285	1,599
Purchase orders processed	1,624	1,786	340
Travel requests processed	349	385	53
Bids opened (operating)	9	15	3

Engineering***Program Description:***

The Engineering Division reviews all development plans for conformity with departmental standards; prepares plans and specifications for water supply projects; coordinates and prepares plans and specifications for projects to be advertised for competitive bidding; administers DWS Capital Improvements Projects and coordinates consultant contracts; prepares and administers agreements with public agencies and private developers; prepares plans and specifications for in-house projects; develops and maintains water supply standards and conducts studies for feasibility of pipeline alignment and sites for reservoirs, pump stations, and other facilities; provides engineering services and field survey support to all divisions and remains in charges of inspecting the construction of all water system facilities for adherence to departmental standards and policies.

Program Goals and Objectives:

GOAL 10	Develop adequate water sources, storage and transmission for urban and agricultural uses.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant	Grant
Establish new water sources to meet demands.	Engineering	Implement exploratory well program. Develop raw water storage to the upcountry surface water systems. Protect Iao Aquifer by spreading pumping and further develop other aquifers to supplement the Central Maui demands.	Enable a ground water model with USGS using well information. Evaluate sites for upcoming storage. Develop East Maui well sites.	N	

GOAL 11	Systematically replace, upgrade and improve existing infrastructure, including pumps, distribution and transmission lines, storage, and appurtenant facilities.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant	Grant
Replace inadequate and/or deteriorated distribution systems. Implement the asset replacement study.	Engineering	Through CIP projects and field operations replace sub-standard piping systems.	Initiate construction of pipe system improvement projects.	N	

DEPARTMENT OF WATER SUPPLY

Engineering

Program Resources - Water Supply Fund:

Expense Type	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004		
	Actual	Actual	Actual	Appropriation	Request	Expansion	Total
Equivalent Personnel E/P	23.0	24.0	23.48	23.48	23.5	0.0	23.5
Salaries and Wages	\$ 888,732	\$ 996,630	\$ 957,829	\$ 1,128,917	\$ 1,178,132	\$ 0	\$ 1,178,132
Operations	83,710	85,847	113,964	112,700	107,065	0	107,065
Equipment	45,424	32,367	36,963	46,100	25,000	25,500	50,500
Program Total	\$ 1,017,866	\$ 1,114,844	\$ 1,108,756	\$ 1,287,717	\$ 1,310,197	\$ 25,500	\$ 1,335,697

Program Highlights:

Completion of the two Kanoa Wells in North Waihee, which supplements the Iao Aquifer.

Completion of the East Maui Water Development Plan and supplemental environmental impact statement.

Completion of granular activated carbon treatment facility at Napili Well A to remove DBCP from the water.

Improve the Upcountry water system to permit issuance of new and additional meters to consumers.

Processed 2,383 building permits, 129 subdivisions.

Performance Measures:

	FY 2002 Actual	FY 2003 Estimate	FY 2003 1st Qtr
Building permits	2,383	2,300	574
Subdivision application	129	110	19
Construction review	108	95	19

Water Resources and Planning

Program Description:

The Water Resources Division is in charge of permit and environmental reviews, regulatory compliance and planning information systems; handles water resource management and conservation; does master, area, and capital planning.

Program Goals and Activities:

GOAL 12	Provide high quality master, area & capital planning to support Department goals and objectives a. Maintain a Living Water Use & Development Plan through the integrated resources process b. Systematically replace, upgrade and improve existing infrastructure. c. Develop adequate water sources, storage and transmission for both urban & agricultural users, including mitigation of drought d. Review the feasibility of integrating the management of public and private water systems. e. Update the rules, regulations, policies and procedures of the Department and implement them in a fair and consistent manner.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Develop a solid planning foundation for long range plans of the Department	Water Resources & Planning	Update forecasts	Updated forecasts by district, subdistrict & community plan area, as well as by customer class.	N	
		Compare forecasts to system needs for source, storage & etc.	List of additional source & storage needed for each district	N	
		Maintain and update capital plan	Annual update to 6 year capital plan	N	
		Develop and maintain GIS and database inventory of Department systems & other data listed in Goal 16.	Updated GIS layers, CIP and asset replacement databases	N	
		Perform office as-built inventory, and field work, GPS, flow & pressure monitoring, & other surveys as needed for development, calibration and update of hydraulic system model.	Updated data regarding system performance to assist in model building and calibration.	N	

Water Resources and Planning***Program Goals and Activities (Continued):***

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Develop a solid planning foundation for long range plans of the Department	Water Resources & Planning	Develop and maintain prioritization matrix for capital projects.	Improved ability to prioritize & to justify prioritization of capital projects.	N	
		With assistance from consultants and other divisions, evaluate hydraulic, operational, financial and other impacts of source development options raised in the WUDP process.	Create a viable source development program.	N	
Establish an on-going participatory process for each water district, including a balanced group of public agencies, land owners scientists, community groups and interested public.	Water Resources & Planning	Staff and coordinate committees as necessary to develop and implement plans and programs, including water advisory committee, information systems integration committee, public meetings on budgets and plans, etc.	Insure adequate staff and public knowledge and participation in planning processes, and opportunity for input	N	
		Include discussion of policy issues in WUDP development process. Insure robust public participation.	Establish recommendations for policies and rules as applicable to the WUDP process with substantial and credible public input.	N	
Maintain information on the status of County Land Use Plans as they affect Water Use Planning.	Water Resources & Planning	Develop & maintain a database of anticipated water impacts of various approvals.	Ability to consider land use decisions and project plans in water forecasts.	N	
Develop and maintain long range master and area plans of the Department including the Water Use and Development Plan, Capital Plan, Contingency Plans, Water Resource Protection Plans and other plans as appropriate.	Water Resources & Planning	Perform all functions listed above, and other not listed as necessary to maintain the Department's plan in good order.	Water Use & Development Plan, Long Range Capital Plan Database, Water Resource Protection Strategy, Contingency Analysis.	N	

Water Resources and Planning***Program Goals and Activities (Continued):***

GOAL 13	Provide responsive & efficient permit & environmental review & other information services to other agencies, divisions & public. a. Support Dept. goal of efficiency & responsiveness through review of requests for permits, environmental assessments and other requests as submitted & through responses to public inquiries. b. Provide information to the Planning Department, other agencies & the public regarding water impacts of permits & project proposals, and regarding other requests for information
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Maximize the usefulness of permit and environmental review functions by maintaining and tracking data for use in planning and program design.	Water Resources & Planning	Develop and maintain database inventory & GIS layers of permit reviews, impacts & project status.	Improved tracking & monitoring of projects & water impacts.	N	
Provide prompt and courteous service to customers in and outside the County.	Water Resources & Planning	Review permits and respond to other inquiries within 15 working days or receipt, or sooner as often as possible.	Improved information flow to other agencies and public who require it.	N	
Maximize the usefulness of permit and environmental review functions by providing educational material on pollution prevention and water conservation with permit responses.	Water Resources & Planning	Provide information on conservation measures, best management practices for target operations and other materials as applicable to permit applicants and to interested public.	Increase the usefulness of review process, as well as improved information flow to other agencies and public who require it.	N	

Water Resources and Planning

Program Goals and Activities (Continued):

GOAL 14	<p>Provide planning support and research necessary for regulatory compliances & to support maximal water quality</p> <p>a. Meet all applicable state and federal requirements to ensure providing the public with water having appropriate and acceptable levels of quality</p> <p>b. Provide programs to the public to facilitate conservation and promote a greater awareness & support of the Department & its activities</p> <p>c. Participate in watershed & well-head protection programs and management of all Maui County's water resources.</p> <p>d. Support the Department's efforts to maximize regulatory compliance and water quality & assist the Department in efforts to maintain high quality water source.</p>
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Support the Department's efforts to maximize regulatory compliance & water quality	Water Resources & Planning	Review, summarize & maintain calendar of EPA, DOH and other regulations as they affect DWS.	Helps to predict and prepare for new regulations and to track compliance with existing regulations.	N	
		Track and assist in compliance documentation. Maintain regulatory compliance documentation & mapping as needed.	Well documented compliance programs.	N	
		Research and coordination for specific compliance programs as needed	Assist in timely compliance with regulations. Past examples include lead and copper materials survey, OCCT recommendations, etc.	N	
		Public education & outreach as needed for regulatory compliance programs.	Prepare presentations & hold or participate in meetings as needed and enable both public & other agencies to have input in regulatory programs (e.g. material survey, OCCT, etc.)	N	

Water Resources and Planning***Program Goals and Activities (Continued):***

GOAL 15	Protect Maui County's water resources, conserve water, and prevent contamination or degradation of water quality and quantity. a. Provide programs to the public to facilitate conservation and promote a greater awareness & support of the Department & its activities b. Participate in watershed & well-head protection programs, and management of all Maui County water resources. c. Support the Department's efforts to maximize water quality & assist the Department in its conservation and watershed protection goals.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Develop, participate in and support partnerships for the protection of source water.	Water Resources & Planning	Participation in East Maui, West Maui, East Molokai and Lanai partnerships. Related support activities. Possible work on South Maui and other partnerships.	Team management of water resources	N	
Manage contracts for the protection and monitoring of water resources	Water Resources & Planning	Contracts: USGS-Monitoring & Updating Status of Iao & Waihee Aquifers; Development of Numeric Groundwater Model for Central Maui; Monitoring Hydrologic & Aquatic Ecology of East Maui Streams; RC&D-Miconia Containment; TNC-East Maui Watershed Protection; West Maui Watershed Partnership-West Maui Watershed Protection; East Molokai Watershed Partnership - Molokai Watershed Restoration; Possible Services for Wellhead Protection Program Development; Information Systems Integration; WUDP & Demand Model Development & Research	Improved protection and monitoring of critical water resources	Partially funded by 2 grants: well-head and Lanaihale watershed	\$319 Source Water Protection Grant, \$319 Lanaihale Restoration Grant

Water Resources and Planning***Program Goals and Activities (Continued):***

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Develop program for well-head protection	Water Resources & Planning	Public process, public & internal review, drafting and revising of draft well-head protection program	WUDP chapter on well-head protection, ordinance to propose	Partially funded	\$319 Source Water Protection Grant
Compile and maintain resource data to develop and maintain meaningful resource picture including improved data on stream use, conservation program impacts, etc.	Water Resources & Planning	Enter and maintain data on resources for use in planning, conservation & other projects	Develop more thorough resource picture.	N	
Improve demand, customer class & end use data to enable better analysis of potential water savings.	Water Resources & Planning	Development & population of demand forecast model, possible additional end use studies, TMK to "prem-ID" matching on un-matched services, entry of historical meter card data.	Enable better analysis of use trends, savings potential and cost-benefits	N	
Implement & analyze results of pilot studies on various conservation measures as applicable, and/or obtain results from other applicable studies.	Water Resources & Planning	Compile documentation of known end-use surveys, pilots and give-aways to date.	Enable better analysis of potential savings and cost benefits.	N	
Develop and implement ongoing, systematic leak detection & monitoring program.	Water Resources & Planning	Arrange for staff training, compile data to date, begin system monitoring.	Improved supply side management & reduced unaccounted-for water.	N	
Establish and fill conservation specialist position	Water Resources & Planning	Establish position description, recruit, hire	Enable systematic work on leak detection, possible water audits outreach, landscape programs, assistance with related field work & surveys (demand analysis, end use inventory, etc.)	N	

Water Resources and Planning***Program Goals and Activities (Continued):***

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Handle public inquiries & provide education & information to public on conservation and resource protection as applicable.	Water Resources & Planning	Provide upon request information, talks, treatment plant model events, etc. on landscape savings, conservation, best management practices for pollution prevention, etc.; improve web-site content as applicable	Effective public education & outreach on conservation & watershed protection	N	

GOAL 16	Develop and maintain planning information systems as needed to support ongoing planning efforts & projects of the Department a. Establish, maintain and update data and tools for use in planning and project implementation.				
Completion Date	On-going				

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Assist in enabling Department to analyze data geographically.	Water Resources & Planning	Develop and maintain GIS data	Continuously updated list of GIS layers, availability of data, etc.	N	
		Perform office as-built inventory and field work, GPS, flow and pressure monitoring, & other surveys as needed for development, calibration and update of hydraulic system model.	Updated data regarding system performance to assist in model building and calibration.	N	
Assist in facilitating improved analysis and modeling capabilities with regard to system performance.	Water Resources & Planning	Develop and maintain calibrated hydraulic model.	Ability to better predict system behavior and performance, model "what if" scenarios and determine system needs.	N	

DEPARTMENT OF WATER SUPPLY

Water Resources and Planning

Program Goals and Activities (Continued):

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Assist in facilitating improved analysis and modeling capabilities with regard to system performance.	Water Resources & Planning	Perform office as-built inventory and field work, GPS, flow and pressure monitoring, & other surveys as needed for development, calibration and update of hydraulic system model.	Updated data regarding system performance to assist in model building and calibration.	N	
Assist the Department in predicting system loads and prioritizing capital programs.	Water Resources & Planning	Develop and maintain demand forecast model.	Improved ability to develop long and short range plans.	N	
Support integration of data to enable coordinated analysis of capital needs with financial and system optimization needs.	Water Resources & Planning	Develop and maintain CIP database.	Improved ability to predict financial needs, develop systematic, well-prioritized guidance for system maintenance and upgrade.	N	
		Correct, integrate and update asset inventory.	Enable better capital and financial planning, enhance use of CIP and asset model.	N	
Support and assist with data analysis tools as needed to support Department-wide goals and objectives.	Water Resources & Planning	Provide services as applicable to other divisions.	Contribute as a team to information flow, facilitate Dept. projects whether assigned to this division or simply supporting projects of other divisions.	N	

Program Resources - Water Supply Fund:

Expense Type	FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		
	Actual		Actual		Actual		Appropriation		Request	Expansion	Total
Equivalent Personnel E/P	4.0		4.0		4.96		4.96		8.0	0.0	8.0
Salaries and Wages	\$ 162,446	\$	150,896	\$	190,590	\$	244,769	\$	264,192	\$ 0	\$ 264,192
Operations	269,590		292,112		724,931		715,960		866,100	0	866,100
Equipment	6,744		15,996		15,224		24,050		10,500	35,700	46,200
Program Total	\$ 438,780	\$	459,004	\$	930,745	\$	984,779	\$	1,140,792	\$ 35,700	\$ 1,176,492

Water Resources and Planning

Program Highlights:

Provided leadership in source water protection to inhibit and remove invasive species including miconia.

Working with the community on conservation issues to reduce water use.

Moving towards conforming the Water Use and Development Plan (WUDP) to the state requirements.

Performance Measures:

	FY 2002 Actual	FY 2003 Estimate	FY 2003 1st Qtr
Permit and environmental review	117	120	38
Fixture distribution			
Showerheads	393	1,300	637
Bathroom aerators	273	1,300	639
Kitchen aerators	124	1,050	517
Hose nozzles	96	1,140	559
Public inquiries	60	60	10
Conservation & pollution education			
Radio ads	1,698	2,500	902
Newspaper ads	24	50	12
Movie preview ads	0	4,500	750

Water Treatment Plant Operations Division***Program Description:***

The Water Treatment Plant (WTP) Operations Division operates and maintains surface water treatment facilities; reviews and evaluates pending water regulations and their impact on DWS operations; and is responsible for the development and implementation of compliance strategies.

Program Goals and Activities:

GOAL 17	To operate the water treatment facilities to supply the highest quality potable water that meets all State and Federal drinking water requirements.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Supply water system demands with water that meets or exceeds water quality requirements and regulations.	Water Treatment Facilities	Continuous operation of all water treatment facilities at Olinda, Pi'iholo, Kamole, Iao, Lahaina, and Mahinahina.	Water production levels	N	
Meet all regulatory deadlines and requirements of the State Dept. of Health and U.S. EPA	Water Treatment Facilities	Participate in the completion of the mandated System wide vulnerability assessments and Emergency Response plans.	Timely and accurate submissions to U.S. EPA	N	
Ensure compliance with all water quality parameters set by the regulating authorities.	Water Treatment Facilities	Efficient and uninterrupted operation of all facilities	No water quality violations	N	
Ensure customer and regulatory standards and meet through staff training and development.	Water Treatment Facilities	In Service Training of staff to advance certifications, ensure safety and maintain continuing education license requirements.	Proper staffing with appropriately licensed personnel.	N	

GOAL 18	To achieve the maximum possible useful life from our existing facilities and equipment through effective preventative maintenance and repair programs.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Prevent premature failures of equipment or systems within the treatment facilities and processes.	Water Treatment Facilities	Execute an effective preventative maintenance program at all facilities.	Limited number of emergency repairs.	N	

DEPARTMENT OF WATER SUPPLY

Water Treatment Plant Operations Division

Program Goals and Activities (Continued):

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Optimize processes to improve overall treatment capability.	Water Treatment Facilities	Install traveling screen at the Mahinahina facility. Cover Pre Sed Basin at the Lahaina facility.	Scheduled CIP projects in the West District.	N	
GOAL 19	To ensure the safety of our employees and the community through responsive safety planning, training and management.				
Completion Date	On-going				

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Adopt chlorine leak and response policy.	Water Treatment Facilities	Finalize draft plan.	Policy adopted and in compliance.	N	
Incorporate the Emergency response driver training program into our program.	Water Treatment Facilities	Driver training program Drive Safe Hawaii.	Better trained emergency response personnel.	N	

Program Resources - Water Supply Fund:

Expense Type	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004		
	Actual	Actual	Actual	Appropriation	Request	Expansion	Total
Equivalent Personnel E/P	30.0	31.0	31.0	29.0	25.0	0.0	25.0
Salaries and Wages	\$ 861,003	\$ 817,822	\$ 902,355	\$ 1,090,463	\$ 1,150,992	\$ 0	\$ 1,150,992
Operations	1,844,171	2,205,138	1,826,685	2,244,050	2,507,200	0	2,507,200
Equipment	87,020	129,861	26,134	104,950	38,500	37,000	75,500
Program Total	\$ 2,792,194	\$ 3,152,821	\$ 2,755,174	\$ 3,439,463	\$ 3,696,692	\$ 37,000	\$ 3,733,692

DEPARTMENT OF WATER SUPPLY

Program Highlights:

Continue to have the lab certified by DOH for sample testing and training on new testing procedures.

Provide clean high quality water to our customers with reliability.

Upgrade the Napili area to connect the SCADA system to the central SCADA monitoring system.

Include the outlying areas of Hana and Molokai into the central system.

Performance Measures:

	FY 2002 Actual	FY 2003 Estimate	FY 2003 1st Qtr
Water produced in 1,000 gallons			
Total East district	2,241,139	2,100,000	640,591
Total West district	1,402,184	1,500,000	349,621
Division total	3,643,323	3,600,000	990,212
DOH compliance violations	0	0	0
Cost per 1,000 gallons			
East district	\$1.90	\$1.85	\$1.71
West district	\$1.52	\$1.48	\$1.50

Field Operations Division***Program Description:***

The Field Operations Division is in charge of water transmission and distribution which includes responding to customer complaints; installing, maintaining, and replacing pipelines; constructing, maintaining and replacing water storage tanks; fixing main breaks and conducting monthly flushing; provides support services for vehicles and equipment, fire hydrants, reservoir sites, system hydraulic valves, heavy equipment, carpentry and Badger Meter installation.

Program Goals and Activities:

GOAL 20	To continue flushing programs to meet Department of Health requirements.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
To provide clean water to our Water Department customers.	Field Operations	To flush the water system on a routine basis.	Test and monitor system controls.	N	

GOAL 21	To provide timely response to system deficiencies to minimize water loss and consumer complaints.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
To provide prompt response to system failures to raise confidence of customers.	Field Operations	To respond to system failures in a timely manner to minimize water loss and customer complaints.	Monitor and log system deficiencies to assist in replacement/refurbishment planning.	N	

GOAL 22	Participate in Capital Improvements projects to upgrade and to replace inadequate pipeline distribution systems.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Replace inadequate lines, to bring the water system to meet water supply standards.	Field Operations	Participate in various CIP projects and assist in transition to improved system.	Maintain and support all aspects of upgraded system.	N	

Field Operations Division***Program Goals and Activities (Continued):***

GOAL 23	Provide and install water meters as approved.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Provide and install meters to meet customers needs in an efficient manner.	Field Operations	Provide more meters to Upcountry as source allows.	Provide, maintain, repair and install meters.	N	

Program Resources - Water Supply Fund:

Expense Type	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004		
	Actual	Actual	Actual	Appropriation	Request	Expansion	Total
Equivalent Personnel E/P	70.0	69.0	69.0	69.0	69.0	0.0	69.0
Salaries and Wages	\$ 2,087,256	\$ 2,116,404	\$ 2,338,415	\$ 2,543,303	\$ 2,657,706	\$ 0	\$ 2,657,706
Operations	901,634	1,124,408	1,222,183	1,060,150	1,618,254	0	1,618,254
Equipment	253,784	167,671	218,875	168,500	474,452	0	474,452
Program Total	\$ 3,242,674	\$ 3,408,483	\$ 3,779,473	\$ 3,771,953	\$ 4,750,412	\$ 0	\$ 4,750,412

Program Highlights:

Able to prevent major breaks in the transmission system to allow continuous service.

Installing meters as approved to provide new services to customers.

Performance Measures:

	FY 2002 Actual	FY 2003 Estimate	FY 2003 1st Qtr
Consumer complaints	2,381	2,400	638
Replace main line (in feet)	5,585	7,630	815
Transponders replaced	778	911	301

Plant Operations Division***Program Description:***

The Plant Operations Division is in charge of pump maintenance and electrical services, which includes maintaining and repairing pump motors, installing, maintaining and monitoring deepwell pumps, providing pump and electrical services to other divisions, and preventative maintenance for all pump and electrical systems; provides electronic and telemetry services, which includes the installation and maintenance of SCADA (Supervisory Control and Data Acquisition) systems; installs and maintains chlorine analyzers and provides technical support to other divisions; handles water quality, backflow and cross connection.

Program Goals and Activities:

GOAL 24	To monitor and maintain clean water efficiently through laboratory testing.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Increase types of laboratory testing.	Plant Operations/ Water Quality Lab	"Gear up" chemistry / microbiological testing.	Initiate procedures for chemical and microbiological certification with the Dept. of Health.	N	

GOAL 25	To provide clean water to all consumers efficiently.
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
To maintain pumping facilities to run efficiently with minimal down time.	Plant Operations	To continue maintaining pumping stations for maximum output. To ensure reservoir levels are at desired levels to meet maximum flow demands.	Monitor and repair, refurbish, or replace pumps, motors, and related controls.	N	
To maintain proper disinfection for consumers safe drinking water.	Plant Operations	To continue and upgrade monitoring safe levels of disinfection.	To ensure proper compliance with Safe Drinking Water Act.	N	

DEPARTMENT OF WATER SUPPLY

Plant Operations Division

Program Goals and Activities (Continued):

GOAL 26	Provide electronic and computer support with emphasis in the development and maintenance of the Dept. of Water Supply's Supervisory Control and Data Acquisition System (SCADA)
Completion Date	On-going

Objective of Activity	Division	FY 2004 Activity	Activity Output	Grant Funded	Grant Amount
Provide through development of a state-of-the-art SCADA system that addresses all of the needs of the Dept. of Water Supply including real time data, alarming and data archiving.	Plant Operations Electronics / SCADA	Extend the scope of the Central SCADA system to incorporate Molokai, Lahaina and Hana systems via a wide area network and develop central data repository for reporting and archiving.	Ensure uninterruptible real time data, alarming and data archiving.	N	

Program Resources - Water Supply Fund:

Expense Type	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004		
	Actual	Actual	Actual	Appropriation	Request	Expansion	Total
Equivalent Personnel E/P	31.0	31.0	31.48	30.96	31.0	0.0	31.0
Salaries and Wages	\$ 846,890	\$ 961,850	\$ 966,886	\$ 1,202,324	\$ 1,237,020	\$ 0	\$ 1,237,020
Operations	5,189,704	5,772,938	5,585,171	6,067,310	6,148,410	0	6,148,410
Equipment	182,646	221,148	167,633	196,000	55,000	25,000	80,000
Program Total	\$ 6,219,240	\$ 6,955,936	\$ 6,719,690	\$ 7,465,634	\$ 7,440,430	\$ 25,000	\$ 7,465,430

Program Highlights:

For the calendar year 2002, the Water Treatment Facilities put 3.588 billion gallons of potable water into the system.

Continue to meet or exceed all regulatory requirements of the State Dept. of Health and Federal EPA.

Utilize staff to allow cross training to reduce required staff for the operation of the treatment plants.

Plant Operations Division***Performance Measures:***

	FY 2002 Actual	FY 2003 Estimate	FY 2003 1st Qtr
Bacti samples	6,000	7,700	1,950
Chemistry samples	6,500	5,000	1,425
Ortho-phosphate samples	2,400	10,400	3,050
SCADA RTU installations	7	20	8
C12 and PH analyzers	5	8	3

DEPARTMENT OF WATER SUPPLY

Personnel Position Summary

Position	FY 02 E/P Appropriated	FY 03 E/P Appropriated	FY 04 E/P Request
Director of Water Supply	1.0	1.0	1.0
Deputy Director of Water Supply	1.0	1.0	1.0
Account Clerk III	2.0	2.0	2.0
Accountant II	2.0	2.0	0.0
Accountant III	2.0	2.0	5.0
Accountant IV	1.0	1.0	0.0
Asst WTP Ops/Maintenance Supv	2.0	2.0	2.0
Asst Waterworks Fiscal Officer	1.0	1.0	1.0
Backflow/Cross Connect I	1.0	0.0	0.0
Backflow/Cross Connect II	1.0	1.0	1.0
Backflow/Cross Connect III	1.0	1.0	1.0
Buyer II	1.0	1.0	1.0
Carpenter I	2.0	2.0	2.0
Cashier II	2.0	2.0	2.0
Chlorination Worker I	1.0	0.0	0.0
Civil Engineer III	2.0	2.0	0.0
Civil Engineer IV	4.0	4.0	6.0
Civil Engineer VI	3.0	3.0	3.0
Clerk Dispatcher II	1.0	1.0	1.0
Clerk II	1.0	1.0	1.0
Clerk III	0.0	1.0	1.0
Clerk Stenographer III	1.0	1.0	1.0
Clerk Typist III	1.0	1.0	1.0
Computer Specialist	0.0	0.0	1.0
Conservation Specialist	0.0	0.0	1.0
Construction Equip Mechanic I	3.0	3.0	3.0
Construction Equip Mechanic II	1.0	1.0	1.0
Customer Relations Assistant	1.0	1.0	1.0
Customer Service Representative II	3.0	3.0	3.0
Dept Information Specialist	1.0	1.0	1.0
Dept Personnel Specialist	1.0	1.0	1.0
Electronic Technician I	3.0	3.0	2.0
Electronic Technician II	1.0	1.0	1.0
Engineering Aid III	1.0	1.0	1.0
Engineering Aid IV	1.0	1.0	1.0
Engineering Drafting Aid III	2.0	2.0	2.0
Engineering Program Manager	1.0	1.0	1.0

DEPARTMENT OF WATER SUPPLY

Personnel Position Summary

Position	FY 02 E/P Appropriated	FY 03 E/P Appropriated	FY 04 E/P Request
Engineering Support Technician	1.0	1.0	0.0
Equipment Operator III	2.0	2.0	2.0
Equipment Operator IV	4.0	4.0	4.0
Field Collection Rep II	0.0	0.0	1.0
Field Operations Division Chief	1.0	1.0	1.0
Hydrologist-Geologist IV / Training Officer	0.0	1.0	1.0
Laboratory Technician I	3.0	2.0	2.0
Laborer II	1.0	1.0	0.0
Land Use Permit Clerk	2.0	2.0	2.0
Meter Reader I	7.0	7.0	5.0
Pipefitter Helper	18.0	18.0	18.0
Pipefitter I	17.0	17.0	17.0
Pipefitter II	7.0	7.0	7.0
Planner III	2.0	2.0	2.0
Planner V	1.0	1.0	1.0
Planning Program Manager	0.0	0.0	1.0
Plant Electrician/Electronic Rpr I	3.0	3.0	3.0
Plant Electrician/Electronic Rpr II	1.0	1.0	1.0
Plant Maintenance Mechanic Helper	3.0	4.0	4.0
Plant Maintenance Mechanic I	6.0	6.0	4.0
Plant Maintenance Mechanic II	1.0	1.0	1.0
Plant Maintenance Supervisor	1.0	1.0	1.0
Pre-Audit Clerk I	3.0	3.0	3.0
Private Secretary	1.0	1.0	1.0
Purchasing Specialist IV	1.0	1.0	1.0
Secretary II	0.0	1.0	0.0
Secretary III	1.0	1.0	1.0
Secretary to Boards II	1.0	0.0	1.0
Storekeeper	2.0	2.0	2.0
Summer Student Interns	2.9	3.4	3.6
Supervising Electronic Tech	1.0	1.0	1.0
Supervising Engineering Aid	1.0	0.0	1.0
Supervising Meter Reader	1.0	1.0	1.0
Treasury Clerk I	1.0	1.0	1.0
Valve Repairer/Pipefitter II	1.0	1.0	1.0
Water Meter Mechanic Helper	1.0	1.0	1.0
Water Meter Mechanic I	1.0	1.0	1.0
Water Meter Mechanic II	1.0	1.0	1.0

DEPARTMENT OF WATER SUPPLY

Personnel Position Summary

	FY 02 E/P Appropriated	FY 03 E/P Appropriated	FY 04 E/P Request
Water Microbiologist I	2.0	3.0	3.0
Water Microbiologist II	2.0	2.0	2.0
Water Microbiologist III	1.0	1.0	1.0
Water Microbiologist IV	1.0	1.0	1.0
Water Resources Planning Clerk	0.0	0.0	1.0
Water Resources Planning Manager	1.0	1.0	1.0
Water Service Supervisor II	5.0	5.0	5.0
Water Service Support Supervisor	1.0	1.0	1.0
Water Systems Superintendent	1.0	1.0	1.0
Waterworks Fiscal Officer	1.0	1.0	1.0
Waterworks Inspector II	4.0	4.0	4.0
Waterworks Training Officer	1.0	0.0	0.0
WTP Electronic Tech	1.0	0.0	1.0
WTP Elec/Mechanic I	0.0	0.0	1.0
WTP Maintenance Mechanic	0.0	0.0	1.0
WTP Operations Division Chief	1.0	1.0	1.0
WTP Operator I	0.0	1.0	1.0
WTP Operator II	8.0	3.0	3.0
WTP Operator IV	10.0	12.0	10.0
WTP Ops/Maintenance Supv	2.0	2.0	1.0
WTP Trainee	2.0	2.0	1.0
WTP Worker	2.0	3.0	3.0
Water Svc Clerk Dispatcher	1.0	1.0	1.0
TOTAL	200.9	198.4	196.6

Equivalent Personnel (E/P) = Full-time equivalents of full- and part-time personnel